

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An image pickup apparatus comprising:

lens group drive means for driving a lens group to adjust a focal point of said lens group;

image pickup means for generating a plurality of screens having different exposure conditions, each of the generated screens having a different focal voltage, wherein the plurality of screens are adjacent temporally, and are synthesized to form a synthesized image;

means for detecting the focal voltage of each of said plurality of screens and storing said detected focal voltage of each respective screen, said focal voltage containing high-frequency components included in each of said plurality of screens; and

focal voltage selecting means for selectively outputting the focal voltage of one of the plurality of screens that is most suited to obtain a desired focus based on a predetermined selection criterion;

wherein-wherein:

each of the exposure conditions sets a value for each of a diaphragm aperture, light quantity storage time and an amplifier gain, and

automatic focusing is carried out according to said focal voltage outputted from said focal voltage selecting means.

2. (Cancelled)

3. (Previously Amended) An image pickup apparatus according to Claim 1, wherein [[in]] during said automatic focusing, said focal voltage selecting means continuously provides a focal voltage that is outputted at the time that said lens group is initially driven, for [[in]] a period from said lens group are initially driven until a desired focus is reached, to thereby stop moving said lens group.

4. (Original) An image pickup apparatus according to Claim 1, wherein said focal voltage selecting means selectively outputs a focal voltage for focusing in accordance with magnitudes of said stored focal voltages inputted to said focal voltage selecting means.

5. (Previously presented) An image pickup apparatus according to Claim 1, wherein said focal voltage selecting means selectively outputs a focal voltage for focusing on the basis of a comparison among luminance level frequency distributions belonging to said screens respectively associated with said stored focal voltages inputted to said focal voltage selecting means.

6. (Previously presented) An image pickup apparatus according to Claim 1, wherein said focal voltage selecting means varies said selection criterion in accordance with magnitudes of said stored focal voltages inputted to said focal voltage selecting means and luminance level frequency distributions belonging to said screens respectively associated with said stored focal voltages.

Claims 7-16 (Cancelled)

17. (Previously Amended) The image pickup apparatus according to claim 1,

wherein:

the focal voltage selecting means is configured to perform a step to compare the focal voltage of each of the plurality of screens obtained under different exposure conditions, and update the focal voltage that is most suited to obtain the desired focus based on a result of the comparing step; and

the lens group drive means adjusts the focal point of said lens group based on the updated focal voltage that is most suited to obtain the desired focus.